

ABSTRACT OF THE DISCLOSURE

In an inter-network connection system of the invention, an IP table is updated so that a physical transmission path where a fault is detected is bypassed. Therefore, after the fault occurs, a frame passing through the physical transmission path subjected to the fault is made to pass through a bypass.

According as the frame arrives through the bypass, a MAC table is automatically updated such that the physical transmission path and logical channel used before the fault occurs is changed to a physical transmission path and logical channel corresponding to the bypass after the fault occurs.

Alternatively, traffic measurement is performed so that a physical transmission path having a traffic amount exceeding a threshold value is bypassed.